

Patent claims

1. A method for interior-space/exterior-space
5 detection of a response transmitter (20) which communicates in wire-free fashion with a base station (8), walls (4) of an interior space (2) being impermeable to a frequency range, in which method two frequency ranges are used for the communication between
10 the base station (8) and the response transmitter (20), the walls (4) of the interior space (2) being permeable to a first frequency range and impermeable to a second frequency range.
2. The method as claimed in claim 1, the
15 communication from the response transmitter (20) to the base station (8) taking place in the first frequency range.
3. The method as claimed in claim 1 or 2, the base station (8) transmitting a communication signal in the
20 first frequency range and a location interrogation signal in the second frequency range.
4. The method as claimed in one of claims 1 to 3, the base station (8) transmitting location interrogation signals selectively from inside or
25 outside the interior space (2).
5. The method as claimed in claims 3 or 4, the response transmitter (20) being woken up using the location interrogation signal.
6. A communications system containing a base
30 station (8) with a transmitter/receiver unit (10) for communication signals and a transmitter unit (14) for location interrogation signals, a response transmitter (20) with a transmitter/receiver unit (22) for the communication signals and a receiver unit (26) for
35 location interrogation signals, and an interior space (2) whose walls (4) are impermeable to one frequency range, the communication signals being transmitted and

09350479.051701

Foreign Version

received in a frequency range to which the walls are permeable and the location interrogation signals being transmitted in a frequency range to which the walls are impermeable.

5 7. The communications system as claimed in claim 6, the base station (8) having a transmitter antenna (12) outside the interior space and a transmitter antenna (16) inside the interior space.

8. The communications system as claimed in claim 6 or 7, the response transmitter (20) containing code data which, for its identification, it transmits collectively in response to a communications interrogation signal.

9. The communications system as claimed in claim 8, the communications system being a component of an anti-theft system of a motor vehicle, the base station (8) being in the motor vehicle and the response transmitter (20) being carried by a person.

09858479.051701